Claims

1. Method for synchronization in a radio communication system that is at least partly self-organizing and has a number of mobile stations
which are situated in reciprocal radio range via an air interface,
characterized in that
at least some mobile stations from the number of mobile stations transmit synchronization sequences, with reference to which some or all of the mobile stations from the number of mobile stations synchronize themselves.

2. Method according to Claim 1,
characterized in that
the synchronization sequences are part of a data packet which carries information.

3. Method according to Claim 1,
characterized in that
the synchronization sequences are transmitted on a dedicated synchronization channel.

4. Method according to one of Claims 1 to 3,
characterized in that
synchronizing mobile stations detect the synchronization positions of the other mobile stations and derive their own synchronization position from these.

5. Method according to Claim 4,
characterized in that
when determining the internal synchronization position a mobile station takes into consideration the quality of the individual detected synchronization positions and/or its

preceding synchronization position.

6. Method according to one of Claims 1 to 5, characterized in that synchronization data occurs in the same burst which also carries the payload data.

7. Method according to one of Claims 1 to 5, characterized in that the synchronization data is transmitted via a further burst which is separate from the actual payload data burst.

8. Method according to one of Claims 1 to 7, characterized in that the synchronization sequences are transmitted cyclically or periodically.

9. Method according to one of Claims 1 to 8, characterized in that a degree is specified for the quality of the reference in order to improve the synchronization.

10. Method according to one of Claims 1 to 9, characterized in that the synchronization data is transmitted via a further burst which is separate from the actual payload data burst.

11. Method according to one of Claims 1 to 10, characterized in that a synchronization for time slots is used for a synchronization of time frames.

12. Method according to one of Claims 1 to 11, characterized in that

only one mobile station starts the transmit operation within a time slot.

13. A mobile station in a radio communication system which is at least partly self-organizing,
characterized in that
means are provided for receiving synchronization sequences from some mobile stations out of a number of mobile stations, with reference to which synchronization sequences the mobile station synchronizes itself.

14. The mobile station according to Claim 13,
characterized in that
means are provided for receiving synchronization sequences from some mobile stations out of a number of mobile stations.

15. A radio communication system including a plurality of mobile stations according to one of Claims 13 or 14.